



U.S. Application No. 10/559,619

Attorney Docket No. Q91849

APPENDIX**LISTING OF CLAIMS:**

1. (Examiner's Proposed Amendment): A valve for a safety tire, equipped with a charging opening for charging gas into an outer gas chamber and an inner gas chamber, which are provided in a tire having a double structure, said valve for a safety tire comprising:

an air-supply passage for ~~an-the~~ inner gas chamber, which causes the charging opening and the inner gas chamber to communicate with each other;

an air-supply passage for ~~an-the~~ outer gas chamber, which causes the charging opening and the outer gas chamber to communicate with each other;

a nonreturn valve member for ~~an-the~~ inner gas chamber, provided in said air-supply passage for ~~an-the~~ inner gas chamber, said nonreturn valve member for ~~an-the~~ inner gas chamber allowing gas to flow from an atmospheric side into the inner gas chamber and making it possible to prevent gas from flowing from the inner gas chamber into the atmosphere, and also allowing gas to flow from the inner gas chamber into the atmosphere by carrying out a predetermined operation;

a nonreturn valve member for ~~an-the~~ outer gas chamber, provided in said air-supply passage for ~~an-the~~ outer gas chamber, said nonreturn valve member for ~~an-the~~ outer gas chamber allowing gas to flow from the atmospheric side into the outer gas chamber and making it possible to prevent gas from flowing from the outer gas chamber into the atmosphere, and also allowing gas to flow from the outer gas chamber into the atmosphere by carrying out a predetermined operation;

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an engaging portion that allows a filling adapter with a coupler to be mounted at

the charging opening in only a fixed direction, which filling adapter includes a first passage that can supply gas to the inner gas chamber by communicating with said air-supply passage for an inner gas chamber, and includes a second passage that can supply gas to the outer gas chamber by communicating with said air-supply passage for an outer gas chamber so as to make a pressure difference between the outer gas chamber and the inner gas chamber, the engaging portion allowing the filling adapter to be mounted so that said air-supply passage for ~~an~~the inner gas chamber communicates with the first passage and said air-supply passage for ~~an~~the outer gas chamber communicates with the second passage, and

detachment-restraining means for restraining detachment of said nonreturn valve member for ~~an~~the outer gas chamber is provided in said air-supply passage for ~~an~~the outer gas chamber at a position nearer to the charging opening than said nonreturn valve member for ~~an~~the outer gas chamber.

2. (canceled).

3. (cancelled).

4. (Examiner's Proposed Amendment): A filling adapter with a coupler, which is adapted to engage with a valve for a safety tire according to claim 1 so as to charge gas from a gas supply source into the outer gas chamber and into the inner gas chamber via the air-supply passage for



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~~an~~ the outer gas chamber and the air-supply passage for the ~~an~~ inner gas chamber, said filling adapter comprising:

a main body portion engaging with said valve for a safety tire;

a second coupling provided in said main body portion and including a valve core connectable to a pressure source to allow gas from the pressure source to be supplied to the tire;

an air chamber provided in said main body portion and connected to said second coupling;

a first passage provided in said main body portion and causing said air chamber and the air-supply passage for the ~~an~~ inner gas chamber to communicate with each other;

a second passage provided in said main body portion and causing said air chamber and the air-supply passage for the ~~an~~ outer gas chamber to communicate with each other;

differential pressure setting means provided in said second passage for distributing gas from the gas supply source to said first passage and said second passage so as to generate a pressure difference therebetween; and

a first coupling connected to said second passage and allowing gas in the outer gas chamber to be released to the atmosphere by carrying out a predetermined operation.

5. (Examiner's Proposed Amendment): A pressure releasing adapter used in a safety tire-rim assembly equipped with a pneumatic tire, an expandable air pocket provided within the pneumatic tire and forming an inner gas chamber, a rim which forms an outer gas chamber



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between the pneumatic tire and the air pocket when the pneumatic tire and the air pocket are

mounted, and the valve for a safety tire according to claim 1, said pressure releasing adapter being used to release gas both in the inner gas chamber and in the outer gas chamber to the atmosphere, and comprising:

a main body portion that can engage with said valve for a safety tire; and

operating means provided in said main body portion for causing gas in the inner gas chamber and gas in the outer gas chamber to be released to the atmosphere so as not to expand said air pocket, by carrying out a predetermined operation with respect to the nonreturn valve member for the an-inner gas chamber and the nonreturn valve member for the an-outer gas chamber of said valve for a safety tire when said main body portion is engaged with said valve for a safety tire.

6. (Examiner's Proposed Amendment): A method for releasing, to the atmosphere, gas in an inner gas chamber formed by an expandable air pocket disposed within a pneumatic tire and for releasing gas in an outer gas chamber formed between a rim and the expandable air pocket of a safety tire-rim assembly, which uses

the valve for a safety tire according to claim 1;

said method comprising:

removing the nonreturn valve member for the an-inner gas chamber prior to removing the nonreturn valve member for the an-outer gas chamber.



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7. (Examiner's Proposed Amendment): A method for releasing, to the atmosphere, gas in an inner gas chamber formed by an expandable air pocket disposed within a pneumatic tire and for releasing gas in an outer gas chamber formed between a rim and the expandable air pocket of a safety tire-rim assembly, which uses

the valve for a safety tire according to claim 1;

said method comprising:

releasing the gas in the inner gas chamber and gas in the outer gas chamber to the atmosphere by engaging a pressure releasing adapter, with said valve for a safety tire, using the pressure releasing adapter, to at least one of:

operate the nonreturn valve member for ~~an~~the inner gas chamber and the nonreturn valve member for ~~an~~the outer gas chamber at the same time and operate the nonreturn valve member for ~~an~~the inner gas chamber before operating the nonreturn valve member for ~~an~~the outer gas chamber.

8. (Examiner's Proposed Amendment): The pressure releasing method according to claim 7, wherein said using the pressure releasing adapter comprises:

operating said nonreturn valve member for the ~~an~~ inner gas chamber with a first protruding portion of said operating means, and

operating said nonreturn valve member for the ~~an~~ outer gas chamber with a second protruding portion of said operating means said first protruding portion being longer than said second protruding portion.



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9. (previously presented): The valve as recited in claim 1, wherein the engaging portion has a positioning hole that receives a positioning pin of the filling adapter.

10. (Examiner's Proposed Amendment): The valve recited in claim 1, wherein the air-supply passage for the an-inner gas chamber is independent and separate from the air-supply passage for the an-outer gas chamber.

11. (Examiner's Proposed Amendment): The valve as recited in claim 1, wherein the air-supply passage for the an-inner air chamber directly connects the inner gas chamber to the charging opening and

wherein the air-supply passage for the an-outer gas chamber directly connects the outer gas chamber to the charging opening.

12. (Examiner's Proposed Amendment): The valve as recited in claim 1, wherein the detachment restraining means for restraining detachment only restrains detachment of said nonreturn valve member for the an-outer gas chamber.

13. (Examiner's Proposed Amendment): The valve as recited in claim 1, wherein the engaging portion allows a-the filling adapter with a-the coupler to be mounted at the charging opening in only a-the fixed direction so as to prevent the pressures in the air-supply passages from being accidentally set inversely.